

State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Aquatic Resources  
Honolulu, Hawaii 96813

March 13, 2009

Board of Land  
and Natural Resources  
Honolulu, Hawaii

REQUEST FOR APPROVAL TO ENTER INTO A NEW FEDERALLY-FUNDED PROJECT  
AGREEMENT (\$269,860) BETWEEN THE RESEARCH CORPORATION OF THE  
UNIVERSITY OF HAWAII AND THE DEPARTMENT OF LAND AND NATURAL  
RESOURCES FOR A MAUI/OAHU MARINE RESOURCES ASSESSMENT PROJECT  
FOR FY10 (7/1/09-6/30/10)

Submitted herewith for your consideration is a request to enter into a new Project Agreement between the Board of Land and Natural Resources and the Research Corporation of the University of Hawaii (RCUH). The Project Agreement runs from July 1, 2009 through June 30, 2010 with funding provided by a U.S. Fish and Wildlife Service Sport Fish Restoration grant in the amount of \$269,860. The required State matching component will be provided by DAR in-kind match and community-based volunteer services.

The goal of the project, as described below, is to provide information sufficient for the Division of Aquatic Resources (DAR) to be able to fulfill its mission to manage, conserve and restore the state's unique aquatic resources and ecosystems for present and future generations. The Agreement will enable DAR to secure assistance from RCUH in implementing the project. RCUH's assistance is required in order for DAR to meet project goals and objectives in a timely way.

Maui/Oahu Marine Resources Assessment Project

The Maui/Oahu Marine Resource Assessments Project will increase DAR's capacity to gather good scientifically based information for use in the development of future management efforts, and for evaluating the effectiveness of current regulations. In FY10 monitoring techniques will be used to assess the effectiveness of the recently enacted lay gill-net ban around the entire island of Maui and at specific locations on Oahu. The assessment of the lay gill-net rules will involve shallow water visual census surveys as well as creel catch census efforts with recreational fishers. The project will also examine causes of coral reef degradation at various locations with efforts made to specifically investigate the role that herbivorous fish and invertebrates play in helping control invasive seaweed growth and therefore, helping to maintain healthy coral reef habitats. Specific research will be conducted at the proposed Kahekili Herbivore Fisheries Management Area in Ka'anapali, Maui. Past monitoring efforts at this location have identified lower than normal herbivorous fish populations, increasing problems with invasive seaweed growth and

rapid coral reef degradation (50% of the living corals has disappeared in the last 14 years). This assessment project will look into fish composition, grazing intensities and habitat health in this area and at suitable control locations. Of specific interest will be gathering information on the role that grazing marine species play in helping keep the habitat healthy and controlling invasive algae. Additional research efforts will look at identifying key grazing fish species, and will work on quantifying their beneficial effects on the coral reef ecosystem. Other aspects of Kahekili coral reef degradation research will center on developing techniques to measure land based pollution loads and to quantify how these loads change with changes on land (increased development, implementation of new watershed management efforts, etc.). It is further expected that information from the project's specific assessment efforts will result in improved knowledge regarding the general state of Hawaii's broad scale marine resources. This knowledge will be important to document the immediate and possible long-term impacts from natural forces (storms, hurricanes, crown of thorn sea-star blooms, etc.), anthropogenic disturbances (runoff, pollution, over-fishing), and displacement of native marine species by alien species (fish, invertebrates and algae).

Approval to enter into the Agreement is being requested concurrently from the Governor, through the Department of Budget and Finance for review and approval. In addition, the Agreement is being reviewed by the Attorney General's Office for preliminary approval as to form. DAR is aware that contract implementation is dependent upon receipt of all required approvals.

RECOMMENDATION:

"That the Board authorize the Chairperson to negotiate and, subject to necessary approvals, enter into a project Agreement with the Research Corporation of the University of Hawaii."

Respectfully submitted,



DAN POLHEMUS  
Administrator

APPROVED FOR SUBMITTAL:



LAURA H. THIELEN  
Chairperson